### **NATIONAL WEATHER SERVICE**

# Western Region Notes

**NOVEMBER 20. 2003** 

## **AROUND THE REGION**

WFO Pocatello Hosts Congressional Staff: On November 7, WFO Pocatello received a visit from Idaho Senator Larry Craig's staff. Mike Matthews and Renee Richardson, of Senator Craig's Pocatello office, and LeAnn Sullivan and Steve Brown, of Senator Craig's Twin Falls office, visited the forecast office to learn about the services provided by the NWS. NWS staff discussed and demonstrated various digital forecasting display products and emphasized the NWS mission of providing forecast and warning services for weather, water, and climate. Senator Craig's staff expressed concern over the prevailing drought conditions in Idaho over the past four years and asked many questions about the climate and hydrologic programs. NWS staff discussed the many partnerships they have with both private and other government agencies for data sharing and how they use NWS products to provide cost reductions and enhance the economy.

51st Annual International Association of Emergency Managers Meeting: The National Weather Service had several representatives, including Seattle WCM Ted Buehner, represent the agency at the 51st Annual International Association of Emergency Managers annual meeting, November 14-20, in Orlando, Florida. Ted's presentation provided an update on the latest NWS products and services to the attendees. Other NWS staff explained the use of NWS technologies during the Columbia space shuttle disaster. The 2003 Annual Conference theme, "Connecting Communities ... Comprehensive Emergency Management," stressed the importance of private sector and public sector disaster preparedness and homeland security collaboration.



WFO Tucson Hydrologist Intern Mike Schaffner gives a presentation on rain gages

Rain Gage Training at USGS Tucson Office: On November 12, 2003, Mike Schaffner (WFO Tucson Hydrologist Intern) and Andy Wigg (Senior Hydrologist from Pima County Flood Control) provided rain gage training to the United States Geological Survey (USGS) Tucson office. The USGS recently purchased close to 40 new rain gages for current USGS gage sites with DCPs throughout Arizona. Training included a summary of how the NWS uses rain gage data. Rain gage maintenance, calibration, and site selection were also taught.

While rainfall data tends to be good in metropolitan Arizona, it is sparse throughout much of rural southeast Arizona. The new rain gage sites will vastly improve the flash flood and

river forecasting program. This is a significant expenditure and investment by the USGS Arizona Water Resources Division and represents the results of active collaboration between the WFO Tucson hydrology program and the USGS.

**WFO Glasgow Hosts Media Workshop**: WFO Glasgow, along with the State of Montana Fish Wildlife and Parks (FWP) Region 6 office, recently held a workshop intended for media, but open to the general public. The workshop, entitled "Weather and Wildlife Together" attracted people from Billings, Great Falls, and western North Dakota, as well as many local area participants. WFO Glasgow introduced its new Products and Services Guide, reviewed the information available from the Glasgow web site, and highlighted their IFPS capabilities. The lunchtime guest speak was John Pulasky, from Montana's Northern Ag Network. John gave a talk on basic meteorology and some humorous forecasting hints. The afternoon session was a discussion of the fishery activities that the FWP office conducts year round on Fort Peck Lake. Another presentation focused on sage grouse populations and tracking of mule deer migrations and populations. After all presentations were complete, the group headed towards Fort Peck, where they were given a tour of the new fish hatchery that is being built and the new Fort Peck Interpretive Center, which houses the two largest aguariums in Montana and will soon hold a full scale T-Rex. A dinner was held at the historic Fort Peck Hotel, with Outdoor Life Editor Mark Henkel, from the Billings Gazette, as the guest speaker.

**WFO Seattle Participates in Winter Workshop:** On November 7, WFO Seattle participated in the King County annual "Take Winter by Storm" winter public information workshop and press briefing. All four major tv networks were in attendance, as were several radio and newspaper reporters. The event was held at the new King County Regional Communications and Emergency Coordination Center, rated as the most sophisticated state or county EOC in the country. Speakers included WFO Seattle MIC Chris Hill, King County Executive Ron Simms, the deputy administrator for WA DOT, and the director of the Seattle Department of Transportation.

Medford Hosts Aviation Open House: On October 25, WFO Medford hosted an aviation open house for approximately 20 pilots. The goal of this activity was to lure pilots back to visit the NWS as a resource for flight planning. During the event, attendees were treated to presentations on self-briefing methods via the Internet and considerations that go into constructing TAFs. Tours of the office were also given and pilots were encouraged to provide feedback on TAFs written by WFO Medford during the winter season.

WFO Tucson and CBRFC Study Recent Burn Areas: Tucson Hydrologist Intern Mike Schaffner and CBRFC Lower Colorado Focal Point Bill Reed spent the week of November 3 touring the recent Aspen and Oracle Hill Fire burn areas. Various gages along the Canada del Oro Wash were visited. WFO Tucson and USGS Tucson Water Resources Division co-hosted a meeting of Aspen Fire Post-Fire Flood Mitigation Task Force on November 5. Bill gave a presentation on the relative flash flood potential index developed by Greg Smith from CBRFC. The index provides a relative indication of flash flood potential using static data layers such as soil type and slope and dynamic data layers such as fire burn severity. Bill also gave a presentation to WFO Tucson

operational staff on November 6. The activities of this week represented ongoing coordination between WFO Tucson and CBRFC in relation to the Aspen Fire burn area and its flash flood ramifications.

### METEOROLOGICAL SERVICES DIVISION

Statement of the Week: Our "Statement of the Week" comes from WFO Great Falls. WFO Great Falls recently verified a high wind warning with two separate reports of 100 mph winds (a portion of the verification reports follow the warning, below). What makes this exceptional is that the forecasters detailed an area along the Rocky Mountain Front where wind gusts of 100 mph were possible. The confidence to add such specific wording were the results of a program written by journey forecaster Ken Pomeroy. The program, which runs four times per day, provides output suggesting whether or not 100 mph winds along the Rocky Mountain Front are possible, or even likely. For this event, the output was in the "likely" range, and the Great Falls staff embraced it. Although the warning below is a continuation (not the initial issuance), it should be noted that the Great Falls staff provided over 24 hours lead time on this high wind event.

MTZ009-010-048-182300-EASTERN GLACIER-NORTHERN ROCKY MOUNTAIN FRONT-SOUTHERN ROCKY MOUNTAIN FRONT-1036 AM MST TUE NOV 18 2003

...HIGH WIND WARNING REMAINS IN EFFECT UNTIL 5 PM MST WEDNESDAY FOR THE ROCKY MOUNTAIN FRONT AND GLACIER COUNTY...

GUSTY WEST WINDS OF 35 TO 50 MPH WITH GUSTS TO 80 MPH WILL CONTINUE THROUGH WEDNESDAY AFTERNOON.

ISOLATED DAMAGING GUSTS OF AROUND 100 MPH ARE POSSIBLE THROUGH EARLY THIS AFTERNOON AND THEN AGAIN TONIGHT THROUGH WEDNESDAY MORNING. THE AREA WITH THE BEST CHANCE OF EXPERIENCING THESE WINDS IS FROM AUGUSTA NORTH TO BABB...AND ALONG AND WEST OF HIGHWAY 89.

MOTORISTS SHOULD AVOID HIGHWAY 2 OR HIGHWAY 89 IN THIS AREA TODAY...ESPECIALLY THOSE TRAVELING IN HIGH PROFILE VEHICLES.

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LOCAL STORM REPORT...UPDATED NATIONAL WEATHER SERVICE GREAT FALLS MT 330 PM MST TUE NOV 18 2003

0620 AM 10 SW EAST GLACIER PARK MT NON TSTM WIND 100 MPH

11/18/03 GLACIER DEEP CREEK RAWS SITE

0921 AM BROWNING MT NON TSTM WIND 100 MPH 11/18/03 GLACIER BROWNING RAWS SITE

1000 AM CHOTEAU MT NON TSTM WIND 91 MPH 11/18/03 TETON CHOTEAU AIRPORT

1030 AM 2 NE CHOTEAU MT NON TSTM WIND 94 MPH 11/18/03 TETON CHOTEAU AIRPORT

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National Marine Focal Point Meeting: Jeff Lorens (Western Region Headquarters) and Ted Buehner (WCM, WFO Seattle) attended the annual Marine Focal Point Meeting, hosted by NWS Headquarters (NWSH) in Frederick, Maryland, November 3-7, 2003. The meeting was also attended by representatives from each of the other NWS regions, the Ocean Prediction Center (OPC), and the Tropical Prediction Center (TPC). Several issues of common concern were discussed during the week, including IFPS, marine program directives, marine communications, rip currents, and forecast operations.

Presentations were made on multiple topics, including several from NWSH, covering a wide range national marine program issues. Ted Buehner presented two briefings on Pacific Northwest marine weather issues. The first briefing focused on WFO Seattle's local marine verification program, which expands beyond the national marine verification program and takes advantage of unique data sources available in the WFO Seattle forecast area. The second briefing focused on special marine forecast concerns in WFO Seattle's inland waters (including the Strait of San Juan de Fuca and Puget Sound) and adjacent coastal waters areas. Jeff Hanson (Johns Hopkins University) presented results from his study on partitioning of wave energy in the oceans, demonstrating how spectral wave data from buoys can be analyzed to determine source regions of wave energy. Additional presentations were given by representatives from The Weather Channel (public/private partnership issues), U.S. Coast Guard (boater safety), U.S. Navy (naval meteorology/oceanography operations), U.S. Power Squadron (boater safety programs and assistance in collecting marine observations from boaters), and Delaware Sea Grant (rip current research and outreach programs).

While a significant amount of time was devoted to presentations, the majority of the week was devoted to detailed discussions on a multitude of agenda items. Because this meeting brought together so many key individuals, both inside and outside of the NWS, those present were able to either resolve many marine weather issues on the spot or establish a firm foundation for future discussions on other issues.

<u>Winter Weather Awareness Weeks in Wyoming and Montana</u>: Weather Forecast Offices in Montana conducted "Winter Weather Awareness Week" activities during

October. Preparedness activities included numerous interviews with local radio stations and daily winter weather information features and safety tips on WFO web pages. Additionally, WCMs from each of the Montana WFOs participated in an interview on a statewide talk show, "Berg in the Morning," highlighting winter weather preparedness activities across the state.

WFO Billings disseminated daily Public Information Statements on NOAA Weather Radio stations and provided winter weather safety and preparedness information to the media. Two local television stations (KTVQ-2 and KULR-8) had "winter weather" themes corresponding to daily themes at WFO Billings. The Billings Gazette and the Big Horn County News published winter weather information and safety tips. Additionally, HAM radio communications tests were conducted on two consecutive evenings during the week. In northwest Wyoming, activities also included a communications exercise conducted with the Wyoming Emergency Management Agency (WEMA) and a "test" Blizzard Warning issued by WFO Billings and relayed to WEMA in Cheyenne.

In western Montana, WFO Great Falls sent media packets to newspapers, radio stations, and television stations. Each of the three television stations in the Great Falls CWFA ran winter weather awareness spots during each of their newscasts on multiple days. The Missoula office emphasized winter weather at spotter training given to DES coordinators and provided a winter weather outlook briefing at a local Disaster Mitigation Planning meeting.

In northeastern Montana, WFO Glasgow emphasized wind chill in its Winter Weather Awareness Week activities. Their efforts included distributing a press release on wind chill effects and handing out wind chill information cards to the public.

The efforts of each of the Montana WFOs turned out to be very well timed. The unseasonably warm weather across the region during the first part of the month abruptly gave way to an early winter arctic blast later in the month. The dramatic change included temperatures dropping into the teens and single digits, strong winds, snowfall up to nearly two feet in some areas, and blowing and drifting snow. Thanks to the efforts of NWS offices in the region, though, the citizens of Montana and northwest Wyoming were better prepared.

#### SCIENTIFIC SERVICES DIVISION

<u>WES Training Deadlines</u>: Two winter related WES cases are due December 1. The Winter TA-Lite for one of cases is dues December 15. Please send Mark Mollner an email when the WES cases are completed and the TA-Lites.

<u>COMET Outreach Proposal Deadlines</u>: The Cooperative Program for Operational Meteorology, Education and Training (COMET) has announced its 2004 Outreach Program Request for Proposals (RFP) for Cooperative Projects. The first draft of the NWS Cooperative proposal is due to the appropriate NWS region by January 19, 2004. The final version must be submitted to the COMET Outreach Program by March 15, 2004.

Recall the Cooperative Projects may be one to three years in duration and typically have budgets with a range from about \$20,000 to \$41,000. If a university is currently funded by the NWS through a Cooperative Institute or the Collaborative Science Technology and Applied Research (CSTAR) program, the work in the COMET proposal should be significantly different or a significant enhancement to the currently funded work and should be clearly identified as such in the proposal. We cannot fund proposals from NCAR or government labs or costs associated with their collaboration on proposed projects. They may participate as unfunded partners. More information and submission requirements can be found online at: http://www.comet.ucar.edu/outreach/coop.htm.

The COMET Program is also again accepting proposals for Partners Projects. The average Partners Project has been approximately \$7,000 (excluding those items funded directly by the NWS). Since Partners Project funds are quite limited, it is unlikely a proposal will be funded if its budget significantly exceeds the average. The following items will not be funded in NWS Partners Projects:

- Faculty salaries
- Computers and related hardware (unless special circumstances exist and the request is approved by the NWS and the COMET Director)
- Foreign travel (requests for exceptions should be made in writing to the COMET director and must include justification for the proposed trip)
- Journal publications with an NWS co-author (costs will be paid directly by the NWS)

Additional information and submission requirements are available at: http://www.comet.ucar.edu/outreach/part.htm.

WR Webmaster Workshop, Jan 27-29, Reno: The date of the WR Webmaster workshop has been changed from November to January 27-29. The focus of the workshop will be upgrading to the new web farm, IFPS web page implementation, AHPS web pages, meeting NWS web policy, security, and other issues. Each office will be asked to send one participant.

<u>Teletraining Session for December</u>: The Virtual Institute for Satellite Integration Training (VISIT) and the Integrated Sensor Training Professional Development Series (ISTPDS) sessions for December are listed below. Offices can register for the teletraining sessions by sending email to: visit@comet.ucar.edu.

To access the teletraining calendar, go to: <a href="http://www.cira.colostate.edu/ramm/visit/ecal.asp">http://www.cira.colostate.edu/ramm/visit/ecal.asp</a>

The teletraining planning calendar with sessions offered by COMET, Interactive Forecast Preparation System (IFPS) PDS and Warning Decision Training Branch (WDTB)is at: <a href="http://www.cira.colostate.edu/ramm/visit/planning.html">http://www.cira.colostate.edu/ramm/visit/planning.html</a>

The sessions currently scheduled for December are:

- Water Vapor Channel Satellite Imagery (Basic, December 4,11,15,19,22, 29)
- Lake Effect Snow II (Advanced, December 9)
- Cyclogenesis: Analysis utilizing Geostationary Satellite Imagery (Basic, December 2,16)

Sessions can be reviewed in advance by following the instructions in the student guides available on the ISTPDS/VISIT page:

http://www.cira.colostate.edu/ramm/visit/visithome.asp

**WR Technical Memorandum**: NOAA Technical Memorandum NWS WR-268 titled "Prediction of Heavy Snow Events in the Snake River Plain Using Pattern Recognition and Regressive Techniques" was released this week. The authors are Thomas Andretta and William Wojick from the Pocatello, Idaho, Office.

**WR Technical Attachment**: WR Technical Attachment 03-09 titled "The Application of Upper Level Heights in Diagnosing and Forecasting San Joaquin Valley Dense Fog Episodes" was released this week. The author is Mark Burger from the San Joaquin Valley, Hanford, CA office. The TA can be found on the web at: <a href="http://www.wrh.noaa.gov/wrhg/03TAs/0309/index.html">http://www.wrh.noaa.gov/wrhg/03TAs/0309/index.html</a>.

### SYSTEMS OPERATIONS DIVISION

**NWR**: The USDA funded NWR in Castle Dale, UT (WNG-669) was installed. The transmitter will provide NWR coverage to Emery County, UT. The installation was completed by Dave Neilson (SLC) and Joe Lachacz (WRH). This is the 5th installation in fiscal year 2004.

The Bridgeport, CA, USDA funded NWR (WNG-595) is installed and on air. The installation took place November 10-13th and could not have been done without Joe Lachacz, Son Nguyen, and especially Dean Prowker, the Reno based facilities technician. Dean responded with only days notice of the installation. This transmitter used the last of the 5 million dollar USDA grant.

<u>AWIPS Status</u>: All Western Region offices completed Operational Build 2 (OB2) installations before the end of October. Scheduling for phase 2 of the AWIPS workstation replacements (Linux) is ongoing. Most sites are scheduled to complete their workstation replacements in December. WFO Glasgow, MT, and the Northwest RFC in Portland, OR, were the Western Region participants in the workstation field tests. WFO Pendleton has volunteered to test the upcoming AWIPS OB3 version.